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I, TERESA KOLODZIEJCZYK, TEAM LEADER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. PS 1424 for a patent by TELPIN PTY LTD as filed on 27 March 2002.



WITNESS my hand this
Ninth day of April 2003

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TEAM LEADER EXAMINATION
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METHOD OF PROVIDING ACCESS TO A RESTRICTED TELEPHONE SERVICE

5 The present invention relates to the provision of automated telephony services, and in particular to providing access to services that are not available to all subscribers to a telephony network. The present invention has particular application in providing access to adult or like restricted telephone services, and it will be convenient to describe the invention in relation to that exemplary application. It is to be realised, however, that the invention may be used in other applications in
10 which selective access may be provided to restricted telephone services.

Telephony services providing content of an adult nature are now widely available. Upon the establishment of a connection with such a service, a subscriber is able to interact with a live operator or alternatively listen to pre-recorded adult content. Because of the nature of the content thus provided, it is important that
15 content be provided only to recognised subscribers having an age above that for which the receipt of such adult content is illegal or unauthorised. It is also important to accurately identify the calling party in order that the correct subscriber may be billed for the provision of the adult content.

Access to current adult telephony services is currently available to a user
20 upon entry of the details of a credit card. The adult content is then delivered, and the credit card holder billed for the provision of the services. Unfortunately, it is relatively easy for such credit card details to be illegally obtained, or for members of the credit card holder's family to obtain and use the credit card details for the unauthorised provision of the adult services.

25 It would therefore be desirable to provide a method for facilitating access to a restricted telephone service that more accurately identifies an authorised subscriber to restricted content than is presently the case.

It would also be desirable to provide a method for facilitating access to a restricted telephone service that provides an improved level of security over existing

telephone services.

It would also be desirable to provide a method for facilitating access to a restricted telephone service that ameliorates or overcomes one or more disadvantages of known telephony services.

5 With this in mind, one aspect of the present invention provides a method for providing access to a restricted telephone service by a subscriber, the method including the steps of:

- (a) verifying a calling party number,
- 10 (b) verifying the identity of the subscriber associated with the calling party number,
- (c) verifying the age of the subscriber, and
- (d) providing the subscriber with a subscriber identifier to enable access to the restricted telephone service.

15 The subscriber identifier in step (d) may typically be a Personal Identification Number or PIN.

Step (a) may include:

receiving a manually generated number from the calling party, receiving an automatically transmitted calling party number, and

20 matching the manually generated number and the automatically transmitted calling party number.

Step (b) may include:

receiving manually generated data from the calling party,

accessing subscriber identity data from a subscriber database of calling party numbers and associated subscriber entities,

25 matching the subscriber identity data with the manually generated data.

The database may be a telephone directory, and may be accessible either

locally or remotely.

Step (c) may include:

receiving manually generated age verification data from the calling party,

accessing subscriber age verification data from a database, and

5 matching the subscriber age verification data with the manually generated age verification data.

The subscriber age verification data stored in the database may include credit card details and/or drivers licence numbers or other details.

10 Another aspect of the present invention provides a system for providing access to a restricted telephone service by a subscriber according to the above-described method.

15 For assistance in arriving at an understanding of the invention, one example of the method and system for providing access to a restricted telephone service by a subscriber is illustrated in the accompanying drawings. However, it should be understood that the following description is illustrative only and should not be taken in any way as a restriction on the generality of the invention as described above.

In the drawings:

Figure 1 is a schematic diagram showing one embodiment of a system for providing access to a restricted telephone service by a subscriber; and

20 Figure 2 is a flow chart illustrating the functional steps performed by the system of Figure 1.

25 Referring now to Figure 1, there is shown generally a system for providing restricted telephone services to a subscriber. The system 1 uses an intelligent network for the provision of such services. The intelligent network consists of a number of switching entities that combine to offer subscribers specialised telephony services, such as restricted telephone services providing adult content. The switching entities contain processing software to process calls according to the

required service. The intelligent network contains a number of Service Switching Points (SSP) 2, 3 each connected to a public telecommunications network such as a Public Switched Telephone Network (PSTN), an Integrated Services Digital Network (ISDN) and Packet Switched Public Data Network (PSPDN) or a mobile cellular network. Each of the SSP 2, 3 are linked to a Service Control Point (SCP) 4 via telecommunications data links 5, 6. The SCP 4 contains service specific application software and accesses customer or subscriber records. Each SSP 2, 3 reacts to specific service triggers and initiates queries to the SCP 4 over a common channel signalling link, such as the Signalling System No 7 (SS7) network, here illustrated by links 5, 6. The SCP 4 acts upon the query from the SSP 2, 3 and returns a message containing the data and instructions required to complete the service. A Service Management System (SMS) 7 is linked to the SCP 4 and by an SS7 link 8, and supports the administration of the customer records within the SCP 4.

The system 1 also includes a manual or automated call centre 9, an intelligent peripheral 10 providing an Interactive Voice Response (IVR) function, and an intelligent peripheral 11 for providing adult content to a subscriber. The system 1 also includes a database of personal identification numbers 12, a credit card database 13, a drivers licence database 14 and a telephone directory database 15. Each of the databases 12 to 15 are accessible by the call centre 9 via a data network 16, such as the Internet. In addition, the personal identification number or PIN database 12 is accessible from the SMS 7.

The operation of the system 1 will now be described with reference to Figure 2. At step 30, a calling party 17 wishing to receive content from the intelligent peripheral 11 will dial a predefined adult telephone service number, for example in the format 190 xxx zzz. The call will be routed via one or more switching exchanges 18 to one of the SSPs 2, 3. At step 31 having previously received instructions from the SCP 4 dictating how calls made with a calling party or "A" number of 190 xxx zzz, are to be handled, the call is routed to the intelligent

peripheral 10 for further processing. From establishment of a connection with the intelligent peripheral 10, a pre-recorded announcement is issued to the caller at step 32 requesting that the calling party provide, either verbally or by means of a telephone key pad, a personal identification number or PIN.

5 If the intelligent peripheral 10 determines, at step 32, that a PIN has been entered, that PIN is transmitted by the intelligent peripheral 10, together with the automatically transmitted calling party or "A" number, to the SCP 4 for forwarding to the SMS 7. Upon receipt of the "A" party number and the manually generated PIN, the SMS 7 consults the PIN database 12 to determine whether the PIN entered
10 corresponds to a PIN previously issued to the subscriber associated with detected calling party number (step 34). If a match between the automatically transmitted "A" party number and the manually entered PIN is determined, at step 35, to be successful, the call is routed from the SSP 3 to the intelligent peripheral 11, at step 36, for provision of the adult telephone service to the calling party 17.

15 If the manually entered PIN does not correspond with the detected "A" party number at step 35, the calling party 17 is connected at step 37 to the intelligent peripheral 10 once more. At step 38, the intelligent peripheral 10 plays a pre-recorded voice announcement to the calling party 11 advising the calling party that access to the adult telephone service may be obtained by the provision of credit card
20 details, via a telephone key pad, as is currently the case with conventional adult telephone services. However, if at step 33 no PIN is determined to have been received, the call from the calling party 17 is routed to the call centre 9, at step 39.

 A process to match a calling party with a subscriber service is then undertaken at the call centre 9, at step 40. The calling party 17 is requested by the
25 call centre 9 to manually generate, either verbally or by use of the telephone key pad, the calling party number from which access to the adult service is requested. The automatically transmitted calling party number is also read at the call centre 9, and compared to the manually generated calling party number provided by the calling party 17. If it is determined at step 41 that this matching was successful, a

process of verifying the identity of the subscriber (as opposed to the calling party) is then undertaken. Accordingly, at step 42, the calling party is requested to provide details of their name and address or other caller identification details. Those name and address details are then compared against details recorded for subscribers in the telephone directory database 15 that is accessed from the call centre 9 via the data network 16. It will be appreciated that an alternative embodiment, the telephone directory database 15 may be stored on a local storage medium, such as a CD-ROM.

If it is determined at step 43 that the caller identification process has been successful, the calling party is then required at step 44 to manually generate, by verbal indication or by use of a telephone keypad, either credit card details or drivers licence details. Depending upon the type of information received at the call centre 9, either the drivers licence database 14 or the credit card database 13 is then accessed. In each of these databases, records are created that enable the matching of a numerical or other field (drivers licence number, credit card number) with name and address detail. Moreover, the existence of a record on each of the databases indicates that the drivers licence holder or credit card holder is at or above the age required to legally receive adult services.

The credit card or drivers licence details provided at step 44 are accordingly combined with the caller name and address details provided in step 42 and attempted to be matched in one or both of the drivers licence database 14 or credit card database 13. If this process of establishing the caller's age is successful at step 45, the call centre 9 accesses the PIN database 12 via the data network 16 and selects an unused PIN for use by the calling party 17. This PIN is provided by the call centre 9 to the subscriber or calling party 17 at step 46. Details of the subscriber that are captured at steps 40, 42, 44 and 46 are then transmitted via the SSP 2, 3 to the SCP 4 for recordal by the SMS 7 in the PIN database 12, at step 47.

Having now been provided with a PIN, a subscriber is able, at a future time, to once again dial the requisite 190 xxx zzz to establish a connection with intelligent

peripheral 10 at step 31. Alternatively, should the subscriber wish to immediately access the restricted telephone service, the subscriber will be connected to the intelligent peripheral 10 at step 31 and requested to enter the newly acquired PIN.

5 If any of the data collection and verification steps result in an unsuccessful process at steps 41, 43 or 45, the calling party 17 is connected to the intelligent peripheral 10 at step 37 and, at step 38, advised that access to the adult service provided by the intelligent peripheral 11 may be had only by manually entering appropriate credit card details.

10 Those skilled in the art will appreciate that there may be many variations and modifications of the previously described system and method for providing access to a restricted telephone service by a subscriber as described herein which are within the scope of the present invention. For example, the restricted telephone services may be accessed not only from within a fixed telephone network, but from within mobile telephone networks or other telecommunications platforms.

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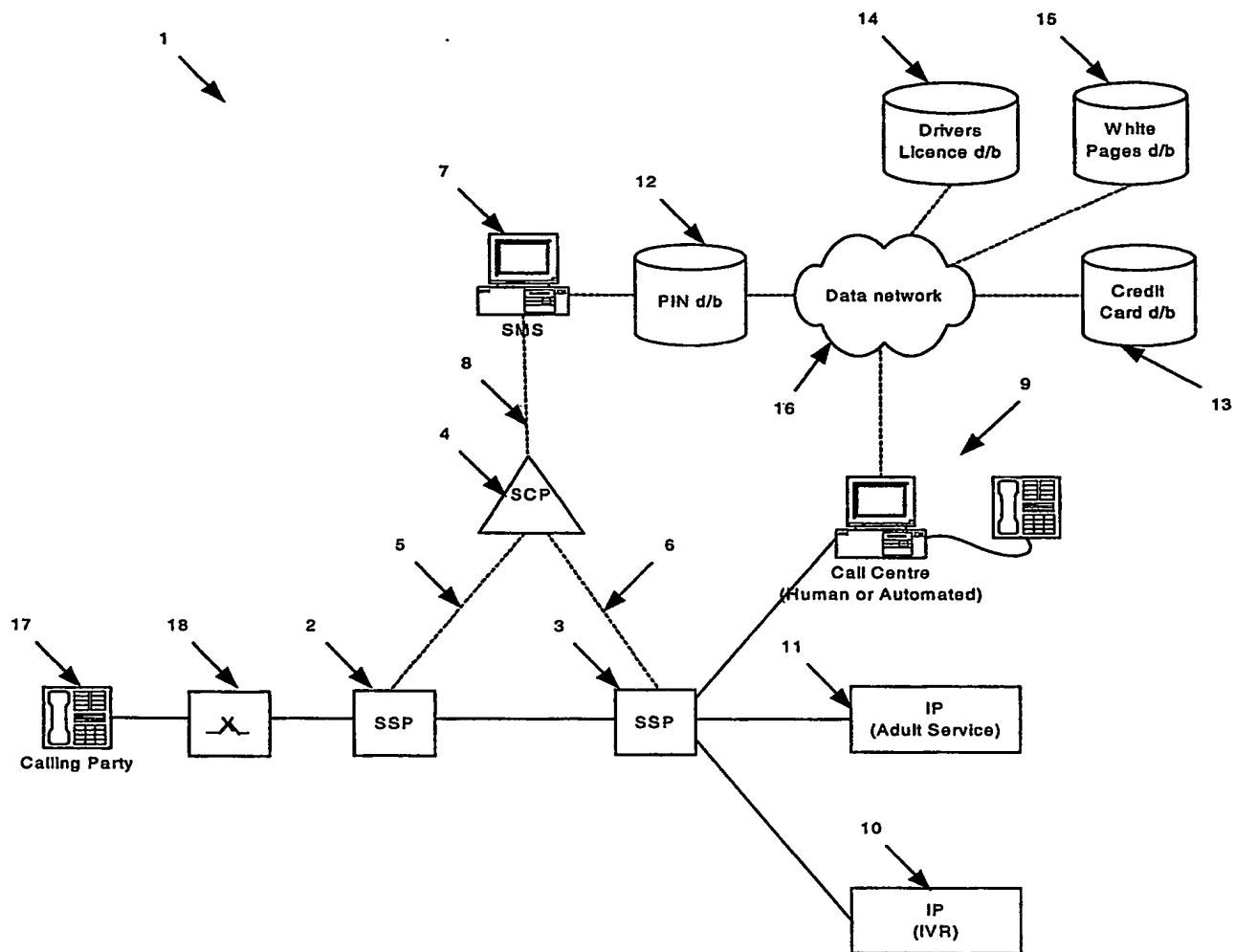


Figure 1

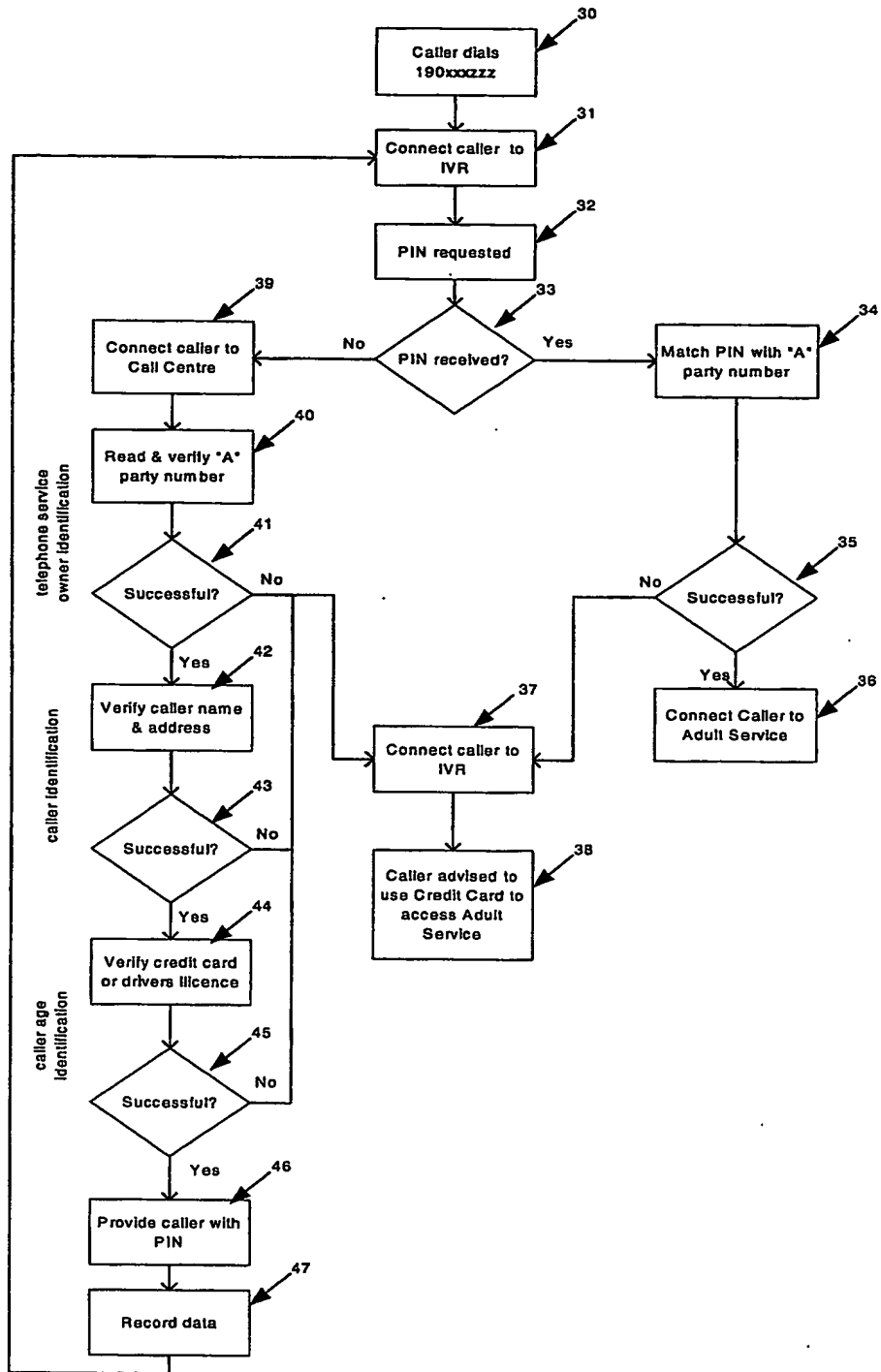


Figure 2